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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/695,571	10/24/2000	Ivan W. K. Shum	Westphal.5755	1960	
	7590 09/10/2003		•		
Patrick J O'Shea			EXAMINER		
Samuels Gauthier & Stevens LLP 225 Franklin Street Suite 3300 Boston, MA 02110			GOODWIN,	GOODWIN, JEANNE M	
			ART UNIT	PAPER NUMBER	
			2841		
			DATE MAIL ED: 00/10/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application N .	Applicant(s)				
•	09/695,571	SHUM ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jeanne-Marguerite Goodwin	2841				
The MAILING DATE of this communication appears on the cover sheet with the correspondenc address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status						
1) Responsive to communication(s) filed on	<u> </u>					
2a) ☐ This action is FINAL . 2b) ☑ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4) \boxtimes Claim(s) <u>1-12</u> is/are pending in the application	l.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-12</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Office Ac	tion Summary	Part of Paper No. 5				

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DETAILED ACTION

Claim Objections

- 1. Claims 1 are objected to because of the following informalities:
 - a. Claim 1, line 9: "said associated rotary gear" lacks antecedent basis,
 - b. Claim 1, line 10: "said associated rotary clock hand lacks antecedent basis,
 - c. Claim 4, line 2: "said plurality of rotary wheels" lacks antecedent basis,
 - d. Claim 4, line 3: "said second hand" lacks antecedent basis,
 - e. Claim 4, line 4: "said plurality of rotary wheels" lacks antecedent basis,
 - f. Claim 4, line 5: "said minute hand" lacks antecedent basis,
 - g. Claim 6, line 2: "said associated clock hands" lacks antecedent basis,
 - h. Claim 7, line 3: "said second" lacks antecedent basis,
 - i. Claim 9, line 2: "said hour hand" lacks antecedent basis,
 - j. Claim 11, line 2: "said hand shafts" lacks antecedent basis,
 - k. Claim 11, line 1: "(12)" should be deleted,
 - 1. Claim 11, line 3: "(13)" should be deleted.

Appropriate correction is required.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the flat panel display as stated in claim 10.

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Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-4 and 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,351,435 to Kronenberg et al. [hereinafter Kronenberg] and in view of the Applicant's disclosure in page 2 of the specification [hereinafter Prior Art].

Kronenberg discloses a timepiece comprising an analog display comprising a hand Z, wherein the hand Z is connected in a rotationally fixed manner to a shaped body F formed in the bottom region of the shaped body F is a gear wheel Z1, of which the top circumference U, a stop/protrusion A, a locking bar/reset claw R that can stop the rotation of the hand Z, a electric drive unit E that provides drive signals, and a stepping motor responsive to the drive command signals. Furthermore, Kronenberg teaches a plurality of segments at different distances where each segment can only interact with a certain stop. Kronenberg discloses all the subject matter claimed by applicant with the exception of the limitation stated in claim 1, i.e., a radio controllable clock comprising a microcontroller that provides a plurality of drive command signals; and the limitation stated in claim 10, e.g., the particular type of display, i.e., a flat panel display.

With respect to the preamble of the claim, i.e., a radio controllable clock: the preamble of the claim has not been given any patentable weight because it has been held that a preamble is

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denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. <u>Kropa v. Robie</u>, 88 USPQ 478 (CCPA 1951).

With respect to the limitation stated in claim 1: The Prior Art states in page 2 of the specification that it is very well known to use a microcontroller to generate pulses/signals to drive/rotate a shaft, respectively. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the electric drive unit E, of Kronenberg with a microcontroller as taught by Prior Art, since it is well known that a microcontroller offer such advantages as speed and programmability.

With respect to the limitation stated in claim 10: Official Notice is taken with respect to the flat panel display, since it is well known in the display art that a flat panel display is one of numerous types of display elements. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the display of Kronenberg with a flat panel display, since it is well known that a flat panel display offers such advantages as simplifying the structure by reducing space and cost.

With regards to the term "adapted to" stated in claim 12: It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. See *In re Hutchison*, 69 USPQ 138. Furthermore, Official Notice is taken in respect to the clock being remote controlled, since it is well known in the clock art to use radio remote controlled clocks. Therefore, it would have been obvious to a person having ordinary skill in the art at the

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time the invention was made to add a radio remote controlled system, to the device of Kroneberg and Prior Art, in order to utilize wireless synchronization.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kronenberg and Prior Art as applied to claims1-4 and 6-16 above, and further in view of US Patent 5,479,379 to Tsuchiya et al. [hereinafter Tsuchiya].

The combination of Kronenberg and Prior Art disclose a device as stated above with regards to claims 1-4 and 6-12. Kronenberg and Prior Art disclose all the subject matter claimed by applicant with the exception of the limitations stated in claim 5, i.e., an alarm hand shaft, an alarm hand (4), alarm stepper motor (22) and an alarm hand rotary wheel (19).

With respect to the limitations stated in claim 5: Tsuchiya discloses timepiece including an alarm hand shaft, an alarm hand, an alarm stepper motor and an alarm hand rotary wheel in order to provide an alarm function. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the alarm elements, as taught by Tsuchiya, to the timepiece, as taught by the combination of Kronenberg and Prior Art, in order to provide an alarm function to the timepiece.

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Inventorship

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 disclose related devices. Rossi discloses a timepiece having a protrusion of the gear wheel and a stopping mechanism; Kawahara et al. Sakamoto et al. disclose timepieces using an electric control circuit to generate drive signals; Perucchi discloses a movable detecting member; Will discloses a device employing a flat panel display; and Nishimura discloses a flat liquid crystal display device.
- 9. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Jeanne-Marguerite Goodwin whose telephone number is (703) 305-0264. The examiner can normally be reached on Monday-Friday (9am-6pm), alternate Fridays off. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724. Any inquiry of a general nature or relating to the status of this

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application or proceeding should be directed to the receptionist whose telephone number is (703)

308-0956.

JMG

Aug. 14, 2003

DAVID MARTIN

SUPERVISORY PATENT EXAMINER

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